UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

August 20, 2007

Mr. Joseph Christopher
Regional Supervisor, Leasing and Environment (MMS 5410)
Minerals Management Service, Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

Subject: Gulf of Mexico Oil and Gas Lease Sale 224, Eastern planning Area
Draft Supplemental Environmental Impact Statement. CEQ: 20070273;
ERP: MMS-E02011-00

Dear Mr. Christopher:

Pursuant to Section 309 of the Clean Air Act (CAA) and Section 102(2)(C) of the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) Region 4 has reviewed the Minerals Management Service's (MMS) Draft Supplemental Environmental Impact Statement (SEIS) for the proposed Lease Sale 224 in the Eastern Planning Area of the Gulf of Mexico. Under Section 309 of the CAA, EPA is responsible for reviewing and commenting on major federal actions significantly affecting the quality of the human environment.

MMS proposes to offer for lease about 134 unleased blocks covering approximately 584,000 acres located 125 miles at its closest point seaward off the coast of Alabama and Florida. Water depths in the lease sale area are greater than 2,600 feet deep. The MMS estimates from 0.1-0.14 billion barrels of oil and 0.16-0.34 trillion cubic feet of gas could be produced from this sale. One other alternative identified in the SEIS is "No Action" whereby MMS would not undertake this lease sale at this time.

The currently proposed sale is within the area addressed by the EIS for Lease Sale 181 EIS completed in 2001. Two reasons are given by MMS for supplementing the earlier EIS. The Gulf of Mexico Energy Security Act of 2006 made additional area available for leasing, and new scientific information relevant to the proposed action is under consideration. MMS reports on damage to oil and gas infrastructure caused by recent hurricanes, and on environmental studies including surveyed deep Gulf biological communities and evaluations of the degradation of drilling fluids following discharge of drill cuttings.

EPA has concern with potential impacts of oil and gas spills including those from pipelines, which have experienced damage from anchor contacts and from storms. Our concern is amplified by the travel distances and potentially long response times to spills that could occur in the lease area. Additionally, EPA is requesting further study of the potential impacts of drilling discharges. We also did not find discussion about the

management of greenhouse gas emissions associated with the proposed oil and gas extraction activities. EPA has rated this document EC-2 (Environmental Concerns-Insufficient Information), meaning that additional mitigation for identified adverse impacts may be appropriate, and additional information should be provided to clarify the proposed action and its environmental affects. EPA's technical comments are further discussed in the enclosure.

Thank you for the opportunity to review and comment on this draft SEIS. We would be pleased to discuss the comments at your convenience by either contacting me at 404/562-9611 (mueller.heinz@epa.gov) or Ted Bisterfeld who is the primary reviewer on my staff at 404/562-9621 (bisterfeld.ted@epa.gov).

Sincerely,

Heinz J. Mueller
Chief, NEPA Program Office

Enclosure

cc: National Marine Fisheries Service, St. Petersburg

ENCLOSURE

Technical Comments on the Gulf of Mexico Lease Sale 224 Draft SEIS

Air Quality

Page 3-3, Section 3.1.1. Discussion of air quality should include the small particulate matter $PM_{2.5}$ National Ambient Air Quality Standard in addition to the listed PM_{10} standard. Further, the $PM_{2.5}$ 24-hour standard was made more stringent and is 35μgm/m3, effective December 18, 2006. Table 3-1 should also indicate the new 24 hour particulate standard.

Page 4-89. A cumulative impacts analysis for air quality impacts to the (Chandeleur Islands) Cape Breton National Wildlife Refuge, a PSD Class I area, is being conducted by MMS. This is a modeling study that is assessing the potential impacts of increased emissions of criteria pollutants along with defining baseline concentrations at Cape Breton and emissions sources and inventories of these pollutants within the OCS leasing region. The MMS has stated previously that this study was due for completion in 2006. The "initial results" are mentioned but EPA Region 4 wishes to be provided the final report when it is available.

Water Quality

Page 4-94 Section 3.2.2.2. Newly published study results of the impact of synthetic-based fluids (SBF) adhered to drill cutting are referenced. While the sediment concentrations of barium and other metals increased from pre-drilling background, sampling did not occur until 5 months to 2 years after drilling ceased. The results do not indicate what concentrations occurred initially and whether there was recovery of sediment quality during this period. Also, there is no mention of whether there will be re-sampling to document pollutant biodegradation and redistribution over time. It is also important to relate the concentrations of SBF constituents to data being analyzed in other MMS studies on their toxicity to the marine organisms living within indigenous sediments.

Spills

Page 4-100, Section 4.3.3.1, Coastal Barrier Beaches. The proposed lease sale is not envisioned to require additional landfalls for pipelines. Recent storms, however, caused massive shoreline erosion along the Gulf Coast. While there may not have been ruptures, pipelines could be left with insufficient cover for protection from additional storms or accidental strikes. MMS or other responsible agencies should evaluate the present guidelines for placement of pipelines, burial depth requirements, and consider appropriate mitigation. Future coastal erosion is certain due to storm activity.

Table 4-12, Offshore Spills from Accidents Associated with Oil Pipeline. Data in this table show most previous accidental spills (greater than 1000 barrels) of oil associated with offshore pipelines were caused by some type of anchor contact with pipelines. MMS should assess the adequacy of the policies and specifications for sub-sea pipelines and consider ways to minimize this source of spills. Pipelines would be in use for 40 years, according to the MMS development scenario. If pipelines are installed with inadequate protection from physical damage, corrective actions after installation would be difficult at best. This tally of pipeline accidents and spill estimates in Table 4-13 do not indicate inclusion of pipelines carrying produced natural gas, and no data for natural gas pipeline could be found. Therefore, it is probable that more anchor contact has occurred than tabulated in these tables. A sub-sea release of gas also has an adverse impact on water quality and marine biota, and therefore damage to gas pipelines should be addressed in the final SEIS.

Despite the long distance to shore, we note MMS has projected 100% of the production from this lease sale to be piped to shore. With an estimated range of 118-273 additional miles of pipeline to be installed as a result of this lease sale, there is greater likelihood of accidental spills. Proposed safeguards for pipelines should be identified and considered in detail in the final SEIS.

Greenhouse Gas Emissions

Methane is a greenhouse gas that remains in the atmosphere for approximately 9-15 years, and is over 20 times more effective in trapping heat in the atmosphere than carbon dioxide (CO_2) over a 100 year period. Flaring of gases is addressed in the document and EPA understands the need to flare methane and other gases from OCS facilities due to safety concerns, etc. There should be some evaluation of the capabilities and feasibility of capturing methane on the oil and gas extraction facilities, rather than continued periodic releases into the atmosphere. Also, ways should be explored for capturing and sequestering CO_2, the bi-product of combustion emissions, on the facilities. From a cumulative perspective, the OCS activities result in large quantities of greenhouse gas released to the atmosphere.

These comments are in accordance with our NEPA review responsibilities. EPA has not yet determined future actions with respect to addressing emissions of greenhouse gases under the relevant regulatory portions of the Clean Air Act. Therefore, these comments on emissions do not reflect, and should not be construed as suggesting future actions in accordance with regulatory provisions of the Clean Air Act.